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RESPONDING TO CHEMICAL ATTACK (U)

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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RESPONDING TO CHEMICAL ATTACK

In view of Iraq's stated intention of using chemical weapons in the Persian Gulf War, the Coalition forces must be prepared to respond. Iraq is capable of conducting such an attack. While the use of chemical weapons may not be militarily significant, the political effect of the use and the response to it may be very significant. Responses including the use of chemical and nuclear weapons are assessed in terms of their legality, political cost, and military effectiveness and found unacceptable. Reliance on diplomatic protests and on post-war criminal sanctions are judged ineffective. A response in the form of increased conventional attack on the Iraqi chemical infrastructure is recommended because that response will preserve the present Coalition, effectively counter the chemical attack, contribute to regional stability, and enhance the reputation of the United States for lawfulness and dependability thus increasing American ability to assemble and lead coalitions in future crises.

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I. INTRODUCTION

Iraq used chemical weapons in its eight year war with Iran. Chemical weapons were subsequently used to crush an uprising of Iraqi Kurds. Iraqi spokespersons, including the head of state, have threatened the Coalition nations with "weapons of mass destruction." The Iraqi ambassador to Japan stated in a television interview that the use of chemical weapons in defense of Iraqi territory was permitted under international law. Iraq has invested heavily in its domestic chemical industry and, prior to 16 January 1991, had the capability of manufacturing militarily significant quantities of chemical weapons.

What should the United States do if Iraq uses chemical weapons in the Persian Gulf War? Retaliate? Remonstrate? Escalate? Litigate? All are possible solutions. None is completely satisfactory. Unfortunately, answering this question is not likely to remain an academic exercise.

The purpose of this article is to review some of the options which will be available to the United States in its role as leader of the Coalition forces should those forces be attacked by chemical weapons. The options were evaluated on the basis of their military effectiveness, political cost, and standing under the law of armed conflict.

The term "chemical weapon" has no universally accepted definition. There is a significant body of opinion which holds, for example, that tear gas and herbicides are chemical weapons.¹ In this discussion, the term "chemical weapon" will refer only to

lethal or casualty-producing weapons.

II. CHEMICAL WEAPONS

Chemical warfare evokes images of World War I. There is good reason for this. World War I was the only occasion when developed nations used chemical weapons in combat with each other. Moreover, with the very significant exception of the nerve agents, the most commonly produced lethal agents, or their functional equivalents, were developed and used in that war. Nerve gas chemistry was developed in German insecticide research prior to World War II. Obviously, the technology required for the manufacture of chemical weapons is not beyond the reach of any nation with motivation and money.

Chemical weapons are divided into categories based on their mode of attacking the human body. The principal groups are blood agents, choking agents, vesicants, and nerve agents. Blood agents are gasses, such as hydrogen cyanide, which enter the body through the lungs and interfere with oxygen absorption. Choking agents attack the lungs directly. Chlorine and phosgene are the best known examples. Vesicants, or blister agents, are chemicals which attack and chemically burn any exposed tissue. Mustard "gas", actually a volatile liquid, is a vesicant with the ability to penetrate untreated shoes or clothing. Nerve agents penetrate clothing and enter the body through the skin or the lungs and attack by interfering with the transmission of nerve impulses.

Iraq probably used lethal chemical agents from all four groups in its eight year war with Iran,² and in crushing a subsequent Kurdish uprising. It is likely that the chemical weapons

used in those conflicts were manufactured in Iraq in plants built with German assistance. At the time, however, Iraq was dependent on its ability to purchase complex chemical precursors in the world economy and only the final synthesis took place in Iraq. Many of the precursors have few or no uses other than in the manufacture of chemical weapons, and international efforts were made to prevent their sale to Iraq. Unfortunately, Iraq has made significant improvements in its domestic chemical industry, and may well have had the capacity to manufacture even the precursors, using generally available industrial chemicals and native raw materials.³ Iraq's current ability to manufacture chemicals has, of course, been seriously impaired, but significant stockpiles may have been created before 16 January 1991.

There is simply no way to know in advance how effective an Iraqi use of chemical weapons might be. There is a widespread belief that chemical weapons are not militarily effective. This belief is based partially on the fact that, with the exception of the initial German use of chlorine in 1915, chemical weapons never played a decisive role in battle between comparably armed opponents. A thorough review of the history of the use of chemical weapons in World War I led one historian to conclude that only where surprise was combined with a lack of protective equipment and training was chemical attack effective.⁴ On the other hand, chemical weapons may be very effective as force multipliers.

Modern chemical defense garb, if properly and promptly donned, is effective against all known chemical weapons. Use of such weapons will not result in the infliction of mass casualties

on trained troops. However, wearing protective clothing and masks significantly impairs the wearer's dexterity and vision. More importantly, the length of time a suit can be worn is greatly reduced in warm weather. The use of persistent vesicant or nerve agents will require time and effort be diverted to decontamination. Finally, minor injuries sustained in a chemically contaminated battle zone can be magnified in their effect. If Iraq should use chemical weapons from defensive positions, the combination of these effects will inevitably be to slow and blunt the ability of the attackers. Accordingly, Iraq can expect to obtain some tangible military benefit from the use of such weapons against attacking Coalition forces.

Moreover, the use of chemical weapons will cause casualties. Nerve agents are terribly toxic, particularly if inhaled. A single breath can be fatal in fifteen minutes. Iraq has chemical munitions for its artillery⁵, and thus can deliver lethal concentrations inside Coalition positions with very little warning. People will make mistakes. The Iraqi leadership may well consider that demonstrating the ability to reach out and kill Americans is worth risking retaliation even if the military results are negligible.

III. CHEMICAL RESPONSE

A. Legal factors

The use of lethal chemical weapons in warfare is forbidden by the "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare",⁶ also known as the Geneva Protocol of 1925.

Both the United States, (1972) and Iraq, (1931) have signed and ratified the Protocol. Use of chemical weapons in response to a chemical attack can be justified on two grounds, (1) that the nation which used them first has taken itself outside the protection of the Protocol, and (2) reprisal.

A reprisal is an act which would otherwise violate international law but which is taken to correct the unlawful acts of another state. Reprisals are an ancient remedy. Resort to reprisals has been criticized as being as likely to cause escalation as compliance with international law.⁷ Moreover, there are few cases where a reprisal can be shown to have caused an errant nation to correct its behavior. In order to qualify as a reprisal, the action should be resorted to only when no other means of enforcing law is available. In practice, this will limit reprisals to wartime, since nations at peace have other avenues of dispute resolution available to them. Wartime reprisals, generally referred to as belligerent reprisals, should also be proportionate to the original offense and in conformity with humanitarian considerations.⁸

Reprisals have been expressly limited by international agreement. For example, the Geneva Conventions of 1949 contain express provisions forbidding reprisals against prisoners of war, medical personnel and facilities, the sick, wounded and shipwrecked, and civilians. Protocol I (1977) to the Geneva Conventions forbids reprisals against historical monuments, works of art, places of worship, objects indispensable to the survival of the civilian population, and works and installations containing dangerous instrumentalities. Obviously, a major problem in se-

lecting a reprisal is finding one that might be effective and yet is not proscribed. One candidate is reprisal-in-kind, the answering of chemical attack with chemical attack. Actually, it is not clear whether such a response is in fact a reprisal since there is a body of opinion which holds that the Geneva Protocol can be limited to prohibiting only first use and that use on a violator is not a reprisal and thus not limited by the rule that a reprisal must be proportional and intended to correct misbehavior. However, decisions on the use of chemical weapons should not hinge on such legalistic points.

B. Political factors

Any use of chemical weapons, no matter how justified, is certain to alienate and offend a significant percentage of the American people. On the other hand, television coverage of Americans killed and injured by poison gas will generate enormous pressure to respond. The reflex reaction will be to respond in kind. It will be important to have an effective alternative to response-in-kind and a well-reasoned explanation if that option is not selected.

Similarly, use of chemical weapons will inevitably bring widespread condemnation of the United States by our Western Allies. Even a legally justifiable use will be perceived as reducing the inhibition against any use which most nations maintain with respect to chemical weapons and thus as making it easier for others to choose to use chemical weapons.

Our coalition partners may be unified in opposition to Iraqi leadership, but, as their domestic statements have made clear,

and as their stated reluctance to invade Iraq shows, they have an affinity for the Iraqi people as brother Arabs. The Coalition would have a difficult time surviving in the face of poisoned Iraqi soldiers.

Despite the foregoing, the use of chemical weapons might be acceptable if the result was to quickly and cleanly force the Iraqi leadership to cease their own use. This is an extremely unlikely consequence. Iraq has shown absolutely no reluctance to sacrifice its soldiers. The prospect of having some proportion of them die from chemical attack instead of high explosives is not likely to cause a change. On the contrary, the Iraqi leadership may actively desire such a response in the hope that universal horror at the results will result in a world-wide call for a cease-fire. Similarly, Iraq may benefit from creating the impression of moral equivalence with the United States, a posture which will severely undercut American ability to be perceived as a force for stability in the region.

C. Military factors

Iraq's initial use of chemical weapons is unlikely to have a significant military effect. The ability of trained, well-equipped soldiers to withstand chemical attack is well documented.⁹

In a military sense, chemical response is not an effective means of countering a chemical attack. Because of her loss of control over the air in the Kuwaiti theater, Iraq is probably limited to artillery and rocket delivered munitions. An American response using chemical weapons would be no more effective than an accurate high explosive attack in counter-battery fire.

Conventional action in the form of attacks on the chemical manufacturing infrastructure, which have already take place, attacks on probable stockpiles, which are ongoing, plus direct counter-battery and air attacks on the delivery sites are a far more effective and direct means of stopping chemical attack than is relying on the uncertain effect of our own chemical munitions or on a change of heart on the part of Iraq.

Moreover, there is no reason to believe that the United States is particularly able to conduct an effective chemical response. Offensive use of chemical weaponry, like any other form of military art, requires study, training, logistical support, and integration into the tactical and operational doctrine of the user. The United States has devoted what limited assets it has had available almost exclusively to chemical defense.¹⁰

IV. PROTEST

The United States can limit its response to protesting Iraq's use of chemical weapons. Both the International Committee of the Red Cross and the United Nations, through the World Health Organization, have the capability of investigating and verifying the use of chemical agents. A number of private organizations, most notably the Stockholm International Peace Research Institute (SIPRI) have considerable expertise and are not in any way aligned with the United States. Iraq can be expected to obstruct any investigation and to shroud its actions with allegations of American misconduct.

The United Nations Security Council can order sanctions for violations of international law. However, sanctions, up to and

including the use of force have already been authorized as a result of Iraq's original unlawful aggression against Kuwait. The Security Council can authorize reprisals or post-war criminal proceedings. Those remedies are considered under separate headings.

As a result, protests alone can at best result in condemnation, perhaps supported by a Resolution of the United Nations General Assembly. Of course protests could and should be joined with any other response chosen.

B. Political factors

A response which results in mere condemnation may be viewed by the American people as unacceptably weak. It is certain that a very vocal minority will have that view.

World opinion will probably greatly approve of a response limited to protest. Aside from the general lack of empathy with which the world views an affront to a superpower, there will be the very considerable reluctance to see an expansion of the war.

C. Military factors

The effectiveness of Iraq's use will have a significant impact on the acceptability of a response limited to protest. If the casualties are few, and the use is perceived as a desperate attempt to prolong or escalate the war, a mild response will be more palatable.

The effectiveness of the Coalition's response will also be significant. If the chemical use has no appreciable impact on the ability of the Coalition to carry out effective offensive operations, and if conventional response succeeds in suppressing Iraq's ability to continue the attack, a mild response may be

acceptable.

V. WAR CRIMES TRIAL

The prospect of having the Iraqi leadership face trial for war crimes has a great deal of appeal. An orderly trial, conducted by impartial judges, for violation of universally held standards of human behavior, appeals to the rational, progressive, humanitarian elements of the world. Visions of Nuremberg, with malefactors haled before a tribunal of victors, given a fair trial, and then hanged, appeal to those who seek the swift imposition of justice. It is a simple, elegant, but unworkable solution.

First, it is incompatible with the stated aims of the war. A war crimes trial presupposes the ability to bring a defendant before the court. The Security Council resolutions from which the Coalition draws its authority contemplate no action beyond the expulsion of Iraqi troops from Kuwait. The United States has repeatedly stated that that is the sole justification for the commitment of forces. If the war does end with the expulsion of Iraqi troops, despite the use of chemical weapons prior to that expulsion, it is difficult to see how a war crimes trial of the Iraqi leadership could be held.

A. Legal factors

Assuming for the moment that such a trial were possible, there is precedent based on the post-World War II proceedings for such trials to be conducted either by an international military

tribunal or under the domestic law of the nations where the offenses occurred. The Nuremberg Tribunals were empowered by a treaty of the victorious powers to prosecute (1) crimes against the peace (planning or waging an aggressive war or a war in violation of treaty), (2) war crimes (violations of the laws or customs of war), and (3) crimes against humanity (inhumane acts committed against any civilian population before or during the war). Similar definitions have been adopted by the United Nations for offenses triable under international law. Moreover, each of the signatories of the Geneva Conventions, which group includes every member of the Coalition as well as Iraq, is committed to punish "grave breaches" of the Conventions. Grave breaches are violations such as wilful killing, wilfully causing great suffering or serious injury, or taking hostage of persons protected by the Conventions. Such persons include all civilians and prisoners of war. The court would certainly not lack charges. The Iraqi leadership could be charged with (1) waging aggressive war, (2) mistreatment of prisoners, and (3) targeting civilians, to name only the most egregious violations, in addition to any charges based on use of chemical weapons.

Western opinion would almost certainly support such a trial, assuming that the defendants were provided with the full panoply of procedural safeguards and protections necessary to assure fairness. The real problems would arise in other areas of the world.

Saddam Hussein is a hero to millions of Arabs and Muslims, including, apparently, substantial sections of the population of

some of our coalition partners and of some non-Arab Islamic states, such as Pakistan, which have a history of alignment with the West. His commission of atrocities against Westerners seems to enhance rather than detract from that image.

Trial by a tribunal of the Coalition is probably the worst possible solution. Such a proceeding would inevitably be widely perceived as tainted by American pressure on the other members. Having the trial in Kuwait under Kuwaiti law has obvious advantages. A trial conducted by Islamic Arabs based on Islamic law, will reduce the impression that the trial is being imposed on the Iraqis by the West. However, Kuwait is a wealthy feudal state with close ties to the West and will be criticized on those grounds as well as on the grounds that it cannot conduct a fair and impartial trial because of its status as a victim of the Iraqis. Trial by a panel of international judges selected by the General Assembly or a similar vehicle with world wide participation would avoid some problems but create others, not least of which would be the vulnerability of such a court to political pressure. Because one thing is certain. No matter who tries the case, it will be one of the biggest politico-media events in history. The world's media will explore and speculate upon the backgrounds and motivations of the judges and prosecutors. The defense will attempt to use the trial as a forum to attack the Coalition and American foreign policy in general; the most preposterous accusations against the West will be raised and solemnly evaluated, thereby gaining credence simply by virtue of having been considered in a public forum. The prospect of an Arab leader on trial will serve as a magnet for the world's terrorists, each

looking to make a mark on history through violence. The possibility of a death sentence will bring the anti-capital punishment activists out. Should the trial nevertheless result in execution, martyrdom will be assured by the sheer volume of attention. Even worse would be a result of lengthy imprisonment, for an imprisoned Saddam will command outside factional loyalties which will impair any attempts to stabilize the Persian Gulf, and will prevent the wounds caused by the present war from healing. His presence will invite terrorist attacks on any nation foolhardy enough to hold him, and he will be perceived as a living symbol of the West's oppression of the Third World.

VI. ESCALATION

A. Legal factors

Reprisals are unlawful acts made lawful by circumstance and intent. Escalation is the lawful application of force in ways which expand the war. There is no requirement that escalation be intended to deter unlawful conduct. Escalatory acts can be taken for any lawful reason, such as reducing casualties or shortening the war, as well as deterring unlawful conduct.

B. Nuclear response

Escalation is far from problem-free, even though lawful. Many lawful measures present the same kinds of problems that reprisals present. For example, there is no international agreement, comparable to the Geneva Protocol, which prohibits the use

of nuclear weapons.* However, even an authorized weapon can have unlawful effects. Nuclear targeting would have to take very careful account of collateral damage to civilians and their property as well as long term radiological contamination, in order to avoid violating those sections of the Geneva Conventions which prohibit indiscriminate attacks and attacks which cause incidental damage which is excessive in relation to the military benefit sought.

A nuclear response, even in response to significant American casualties, and even if limited in effect to enemy combatants, will be a policy failure. The United State's ability to be a stabilizing force in the region will be severely impaired if nuclear weapons are used on Muslims. Moreover, the ability to make optimal use of nuclear weapons will be constrained by Kuwait's foreseeable and understandable reluctance to see its own territory destroyed.

Additionally, even our Western allies will view the use as a violation of an unspoken trust, the result of which will be to make nuclear weapons simply a big bomb, and thus more usable than they are in their present almost mystical form.

Militarily, a nuclear response is far superior to a chemical reprisal. Not only are nuclear weapons far more effective in causing damage and casualties, but the training, logistical support, and doctrinal integration necessary for use are in

* This is not to suggest that the first use of nuclear weapons is universally recognized as a lawful response. On the contrary, it is probable that a majority of the world's nations consider the use of nuclear weapons a violation of customary law of war. This is emphatically not the United States' position, however.

place.

C. Assassination

The United States could cast off its self imposed restriction on personally targeting the Iraqi leadership. Such an action does not violate any of the laws of armed conflict.

A stated intent to target enemy leadership has the advantage of providing a clear forceful response to a chemical attack. It strikes directly at the guilty party instead of attempting to dissuade or punish that party by attacking his soldiers. If successful, it may result in not only ending the use of chemicals, but also in ending the war. Success will also neatly finesse many of the previously discussed problems inherent in a war crimes trial. Its drawbacks include concern that such a declaration will reduce the inhibition against assassination. A good case can be made, however, that there is very little inhibition anyway. Moreover, a precedent for assassination is probably better than a precedent for chemical or nuclear use. A direct attack can also be criticized as unnecessarily creating a martyr. This is a difficult issue to evaluate. Is Saddam revered but deceased really more of a destabilizing influence than a bloody but unbowed Saddam still in control of Iraq? An announced intent to personally target Iraq's leadership may, if unsuccessful, impair post war relations between the United States and Iraq. On the other hand, Saddam's call for worldwide terrorist attacks on Western leaders and his use of chemical weapons on Coalition forces will probably have impaired it beyond our poor power to add or detract.

D. Expansion of war aims.

The Security Council, as part of its obligation to act on war crimes, could expand the authorized use of military force to include the removal of the present government of Iraq.

Attempting to remove the government of Iraq by force of arms will require an enormous increase in time and money invested, it will significantly raise the casualties of both the Coalition and Iraqi forces, it will fracture the Coalition itself, it may well result in a general decrease in regional stability, and worst of all, it might not even be successful. It is difficult to imagine any gain which would justify that risk.

E. Expansion of war effort

A lesser conventional expansion which would not require the blessing of the Security Council might consist of simply increasing the intensity of current operations. Such a response will earn the Coalition respect for its refusal to be goaded into lawful but unconventional responses. The image of the Coalition as a force for stability and order will be enhanced. However, such considerations must not become the sole criteria for choosing military actions. Such attacks should be militarily useful. This, in turn, begs the questions: Are there lawful and effective military steps that we are not taking? And if so, why?

Chemical attack by Iraq will in itself provide a host of newly significant targets: the artillery positions involved in the attack, their associated storage areas and, especially, their command and control centers. Chemical attack will also justify renewed and intensified interdiction missions designed to prevent support from reaching the suspected delivery sites, attacks on

the transportation routes involved and another round of strategic attack on Iraq's entire chemical infrastructure with the intent of preventing the manufacture or assembly of additional chemical weapons.

VII. RECOMMENDATION

If the Coalition grimly buckles down and increases its lawful conventional attack in the face of an insidious, cowardly provocation like a gas attack, the result will be to accentuate the difference between the desperate lawless violence of Iraq and the controlled lawful power of the United Nations and the United States. It will reward the Arab Coalition powers and greatly increase the ability of the United States to maintain an effective presence in the Gulf region. It will increase respect for the United Nations Security Council and enhance that body's ability to act for a new world order. It will avoid setting precedent for chemical, nuclear, or other dangerous precedent for solving world problems.

Refraining from engaging in the greater lawful responses available will require a statesman-like view of the long-term effects. But the benefits from showing restraint will show up at the next crisis, and the one after that. Future American leaders will find their job made easier by today's foresight.

- (1) Ann Van Wynen Thomas and A. J. Thomas, Jr., Legal Limits on the Use of Chemical and Biological Weapons. (Dallas, TX: Southern Methodist University Press), pp. 74-75.
- (2) Julian Perry Robinson, Chemical and Biological Warfare Developments: 1985 (Oxford and London: Oxford University Press, 1986), pp. 6-11.
- (3) W. Seth Carus, The Genie Unleashed: Iraq's Chemical and Biological Weapons Program, The Washington Institute Policy Papers, no. 14 (The Washington Institute For Near East Policy, 1989), pp. 11-23.
- (4) Institute for Defense Analyses, Historical Evaluation and Research Organization, Implications of Present Knowledge and Past Experience for a Possible Future Chemical/Conventional Conflict, IDA Paper P-1810 (Fairfax, VA: 1985), pp. A-14, A-15.
- (5) Carus, p. 10.
- (6) League of Nations Proceedings, A 13.1925.IX (1925).
- (7) Antonio Cassese, ed., The New Humanitarian Law of Armed Conflict (Naples: Editoriale Scientifica, 1979), p. 237.
- (8) Cassese, p. 236.
- (9) Institute for Defense Analyses, p. A-14.
- (10) Edward M. Spiers, Chemical Warfare (Urbana and Chicago: University of Illinois Press, 1986) pp. 160-174.

BIBLIOGRAPHY

Bassiouni, M. Cherif, ed. A Treatise on International Criminal Law. Springfield IL: Charles C Thomas, 1973. v. I.

Carus, W. Seth. The Genie Unleashed: Iraq's Chemical and Biological Weapons Production. The Washington Institute Policy Papers, no. 14. Washington Institute for Near East Policy, 1989.

Cassese, Antonio, ed. The New Humanitarian Law of Armed Conflict. Naples: Editoriale Scientifica, 1979.

Institute for Defense Analyses. Historical Evaluation and Research Organization. Implications of Present Knowledge and Past Experience for a Possible Future Chemical/Conventional Conflict. IDA Paper P-1819. Fairfax, VA: 1985.

International Committee of the Red Cross, Protocols additional to the Geneva Conventions of 12 August 1949. Geneva: 1977.

Kalshoven, Frits. Belligerent Reprisals. Leyden: A. W. Sijthoff, 1971.

Robinson, Julian Perry. SIPRI Chemical & Biological Warfare Studies. London and Philadelphia: Taylor & Francis, 1985. v. 2.

Robinson, Julian Perry. SIPRI Chemical & Biological Warfare Studies. Oxford: Oxford University Press, 1986. v. 6.

Robinson, Julian Perry. The Problem of Chemical and Biological Warfare. Stockholm: Almqvist & Wiksell, 1973. v. II.

Spiers, Edward M. Chemical Warfare. Urbana and Chicago: University of Illinois Press, 1986.

Thomas, Ann Van Wynen and Thomas, A. J. Jr. Legal Limits on the Use of Chemical and Biological Weapons. Dallas, TX: Southern Methodist University Press, 1970.

United States Department of the Army. Treaties Governing Land Warfare. DA-PAM No. 27-1. Washington: 1956.